

METHODS, SYSTEMS AND MEANS FOR PROVIDING DATA  
COMMUNICATIONS BETWEEN DATA EQUIPMENT

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ABSTRACT

A method and system for the communication of data between data systems and through an optical interface is disclosed. A multi-component optical package (photonic package) and at least one optical fiber are coupled to create an optical data interface, thereby permitting data communications between devices, for example CPUs and display units, through the optical interface. The photonic package thus provides a highly integrated and flexible high bandwidth communications package suitable for data communications. At least one electro-optical data component is mounted on a multi-element leadframe. The photonic components and multi-element leadframe is then overmolded with an encapsulant to create an integrated multi-photonic-device package. The light source may be configured as a plurality of vertical cavity surface emitting lasers (VCSELs) and/or detectors. The light source may be coupled with a plurality of optical fibers to create an optical fiber interface. The plurality of optical components may be configured to form a detector array.